

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WISCONSIN

ENCAP LLC,

Plaintiff,

v.

Case No. 11-C-0808

OLDCASTLE RETAIL INC. and OLDCASTLE
LAWN & GARDEN, INC.,

Defendants.

ORDER GRANTING PRELIMINARY INJUNCTION

Plaintiff Encap LLC (Encap) is a Wisconsin company that develops, manufactures, and distributes soil improvement products for the consumer and commercial lawn and garden industry. On August 25, 2011, Encap filed this action for patent infringement, trade dress infringement, false designation of origin, and unfair competition against Defendants Oldcastle Retail, Inc., and Oldcastle Lawn & Garden, Inc. (collectively Oldcastle). Oldcastle, a Delaware corporation with its principal place of business in Atlanta, Georgia, sells building materials, fencing, patio pavers, and lawn and garden packaged materials. Encap's claims are based on Oldcastle's marketing and sales of its "Green 'n Grow" lime product and its "Jolly Gardener Fast Acting Lime," which compete with Encap's "Fast Acting" lime product. Encap alleges that Oldcastle's products infringe patents it holds on the technology underlying the products and that Oldcastle has been marketing its products using the registered trademarks and trade dress that Encap developed and uses in its sales

of its own lime product. The case is before the Court on Encap's motion for a preliminary injunction to enjoin Oldcastle from continuing to manufacture, market and sell its fast acting lime products in violation of Encap's rights. The Court conducted a hearing on Encap's motion on April 5, 2012, and requested supplemental briefing thereafter. Based on the arguments presented and the affidavits and briefs on file, the Court hereby grants Encap's motion.

I. Background

Encap, headquartered in Green Bay, Wisconsin, was formed by Michael Krysiak and Feeco International, Inc., in 1999. According to Krysiak, "Encap invents, manufactures and distributes environmentally friendly advance soil technology products for consumers and commercial markets." (Krysiak Decl., ECF 11 ¶ 4.) Encap's products are designed to improve environmental conditions such as soil pH, help establish grass and flower seeds, and help reduce soil erosion, using an environmentally based or "green" business model. (*Id.*) Using its Advanced Soil Technology (AST®), Encap developed a variety of products, including Lawn Kit®, Grass Repair Kit®, Lawn Starter Mulch, PAM 12®, and various "FAST ACTING" products. Encap claims that its AST® technology has been at the cutting edge of solutions to stabilize soil and improve soil conditions for healthy plant growth. (*Id.* ¶ 5.) This case involves the use of this technology in the application of lime.

Lime is applied to lawns and soil to reduce soil acidity (i.e., increase soil pH) by changing some of the hydrogen ions into water and carbon dioxide. (Krysiak Decl. ¶ 7.) Soil pH is considered a "master variable" because it controls many chemical processes that take place within the soil. (*Id.*) Lime products also help deliver calcium, an important nutrient. (*Id.*) Prior to

Encap's entry into the marketplace, lime products were sold in two primary forms: pulverized lime or granulated lime (First Generation Products). (*Id.* ¶ 8.) These First Generation Products were considered commodity products, with low margins and high volumes. Moreover, these products presented practical concerns because the pulverized products were dusty and dirty for the user (and retailer) and the granulated lime product provided only limited coverage for the consumer (i.e., 30 pounds could cover approximately 1,000 square feet). (*Id.*) More importantly, the first generation products would wash away and the nutrients would be lost in run off during rain or watering.

Encap claims that it "transformed the lime product industry into a 'value added' industry through technology that enables the lime to more actively engage the soil." (*Id.* ¶ 9.) More specifically, Encap contends that it focused its research and development efforts on including a soil stabilizer in a lime granule to assist in holding calcium in the soil once the product was applied. According to Krysiak, Encap's research and development culminated in the creation of a delivery mechanism for water-soluble polyacrylamides (PAMs) and other water-soluble soil stabilizers. PAMs are synthetic water-soluble polymers made from monomers of acrylamide. Anionic (negatively charged) PAM particles bind soil particles together, thereby reducing erosion in the field and promoting coagulation and rapid settling in sedimentation basins. (Krysiak Decl. ¶ 20.) PAM increases aggregation of small particles to improve soil stability and prevent soil detachment, decreasing the settling time of particles that become suspended to aid in their deposition, thus improving runoff water quality. (*Id.* ¶ 20.) Encap's research demonstrated that PAM and other soil stabilizers can be applied to lime and other solid carriers at known rates to control the movement of nutrients/amendments in and through the soil. (*Id.* ¶ 22.)

Encap applied for and obtained patents on its new technology. At issue in this case are U.S. Patent Nos. 7,503,143 (the ‘143 Patent) and 7,874,101 (the ‘101 Patent). The ‘143 Patent, which has an application date of October 15, 2002, relates to “a method for applying PAM to soil wherein said PAM is intermixed, impregnated, and/or applied to solid carriers.” (‘143 Patent Abstract.) The ‘101 Patent is broader and concerns “a method for applying a water soluble soil stabilizer to soil wherein the soil stabilizer is added to a solid carrier.” (‘101 Patent Abstract.) The application for the ‘101 Patent was filed on March 4, 2010, but it was a continuation of an application filed on October 15, 2003, itself a continuation in part of the application for the ‘143 Patent filed a year earlier. Encap contends that the patents are but two of many it has obtained based on its research and development in the area of soil technology over the past decade. Encap has expended millions of dollars and thousands of hours to develop the technology at issue. The inventions claimed in the patents in suit, Encap contends, provide a foundation for new and improved methods for efficiently applying lime and other nutrients to plants and soil in an environmentally sound manner. This platform technology has been met with great demand to stabilize soil and improve soil conditions for healthy plant growth.

Encap practices the ‘143 and ‘101 patents in its own “Fast Acting Lime Plus AST(r)” product, which it first unveiled at the National Hardware Show in May 2006. The evidence suggests that Oldcastle learned of Encap’s technology at the same show or shortly thereafter. Encap’s Website Traffic Monitoring Report shows that Oldcastle personnel visited Encap’s website on numerous occasions between 2006 and 2007, beginning in May 2006 with a search of “fast acting lime.” (Krysiak Decl., Ex. 1, ECF 38-1 at 8.) Encap counted twelve visits from Oldcastle IP addresses to Encap’s AST web-page in 2007. (*Id.* at 6–10.) Internal Oldcastle emails suggest that

Oldcastle personnel performed a patent search in March 2007, using such search terms as “Encap,” “AST®,” “PAM,” “anionic polymers,” and “Fast-Acting® Super Lime.” (ECF No. 44 Ex. H.) These search terms would have undoubtedly revealed the fact that Encap had an application for a patent on its technology pending. Further evidence suggests Oldcastle was frequently reviewing Encap’s website, product literature, and packaging. (ECF No. 44 Ex. B, Bruce Dep. at 249.) Indeed, the evidence shows that Oldcastle had a detailed analysis done of Encap’s product at an outside laboratory (Oldcastle has no research and development department of its own) so that it could reverse engineer the product to determine how much it would cost to produce.

Oldcastle came out with its own fast acting lime product, Green ‘n Grow Fast Acting Lime, in the latter half of 2007. Not surprisingly, the evidence reveals that Oldcastle’s product was essentially the same as Encap’s. Oldcastle uses the same active ingredient, PAM, and lists the same quantity of active ingredient (1.5%) on its bag. Oldcastle packaged its product in bags containing essentially the same information and product description as Encap’s packaging. Having copied its product and trade dress without having to incur research and development expenses of its own, Encap contends that Oldcastle is now able to offer its competing product at substantially lower prices. In 2011, Oldcastle secured a test market of its product at approximately 20 Lowes stores where its product was selling for more than four dollars less than Encap’s. Encap’s wholesale distributors have also seized upon the lower Oldcastle prices to demand lower prices from Encap. Absent preliminary relief protecting it from Oldcastle’s sales of its infringing product, Encap contends it risks even greater price erosion that could endanger its very existence.

II. Legal Standard Governing Preliminary Injunctions

In deciding whether to grant a motion for a preliminary injunction, the Court must consider four factors: 1) likelihood of success on the merits; 2) irreparable harm if an injunction is not granted; 3) the balance of hardships; and 4) the impact on the public interest. *Erickson v. Trinity Theatre, Inc.*, 13 F.3d 1061, 1067 (7th Cir. 1994). When applying this standard to requests for preliminary injunctive relief, the Seventh Circuit has adopted a “sliding-scale” approach, under which the stronger the case is on its merits, the less irreparable harm must be shown. *Abbott Laboratories v. Mead Johnson & Co.*, 971 F.2d 6, 12 (7th Cir. 1992).

To establish a reasonable likelihood of success on the merits in a patent case, a plaintiff must show that in light of the presumptions and burdens that will inhere at trial on the merits (1) the plaintiff will likely prove that the defendant infringes the patent and (2) the plaintiff’s infringement claim will likely withstand the defendant’s challenges to the validity and enforceability of the patent. *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1350 (Fed Cir. 2001).

Determination of patent infringement is a two-step process. First, the Court must construe the meaning of the claims, an issue of law exclusively within the province of the Court. *Amazon.com*, 239 F.3d at 1350; *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995), *aff’d*, 116 S.Ct. 1384 (1996). Second, the claims as properly construed must be compared to the accused product to determine whether the accused product has all the claimed elements. *Id.* Terms in a claim are given their ordinary and customary meaning and are interpreted in light of the patent specification and the prosecution history. *Phillips v. AWH Corp.*, 415 F.3d 1301, 1312 (Fed. Cir. 2005); *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996); *Envirotech*

Corp. v. Al George, Inc., 730 F.2d 753, 759 (Fed. Cir. 1984). Patents are presumed to be valid. 35 U.S.C. § 282. Section 282 places the burden of persuasion upon the party seeking invalidity.

III. Likelihood of Success on the Merits

A. Infringement

The evidence strongly suggests that Oldcastle essentially copied the Encap product that practices the ‘143 and ‘101 Patents. But the fact that Oldcastle has copied Encap’s product does not mean that Oldcastle’s product infringes Encap’s patents. Infringement is determined by comparing Oldcastle’s product to the claims of Encap’s patents, not to Encap’s product. Encap has submitted a claim chart which sets out the elements of the relevant claims and demonstrates using Oldcastle’s packaging and website how its Green ‘n Grow lime product literally infringes the ‘143 and ‘101 Patents. (Weiss Decl., Ex. H, ECF No. 9-8.) Independent Claim 1 of the ‘143 Patent recites:

A method for applying polyacrylamide (PAM) to soil comprising: impregnating and/or applying water soluble PAM to a solid carrier; leaching said PAM out of said solid carrier with water into said soil; binding said PAM to said soil; wherein application rates of said solid carrier to said soil is related to desired amount of said PAM to be metered to said soil.

(‘143 Patent, Col. 11, ll. 23–32.)

The term “solid carrier” means organic or inorganic materials that can be applied to soils, including fertilizers, soil amendments, soil conditioners, and/or waste products. (‘143 Patent, Col. 7, ll. 54–57.) “Impregnating” or “applying” water soluble PAM to a solid carrier means incorporating the PAM into, or combining the PAM with, the solid carrier. (‘143 Patent, Col. 9, ll. 24–27.) “Leaching said PAM out of said solid carrier with water into said soil; binding said PAM

to said soil” means that water is applied, either naturally through rain or by man-made means, after the solid carrier is applied to the soil, and as a result, the PAM is released into and binds with the soil. (‘143 Patent, Col. 8, ll. 3–8.) Finally, “wherein application rates of said solid carrier to said soil is related to desired amount of said PAM to be metered to said soil” means that the amount of PAM that is applied to the soil is determined by the amount of the solid carrier that is applied. (‘143 Patent, Col. 7, ll. 61–63.) Encap has provided a similar claim chart for Independent Claim 1 of the ‘101 Patent which is also a method claim.

There is no dispute that lime is a solid inorganic carrier as that term is used in the patents in suit. There is also no dispute that Oldcastle combines PAM with its lime. Robert Segal, Oldcastle’s Vice-President in charge of its Materials Group, testified that Oldcastle agglomerated lime and PAM into pellet form. It is primarily with the remaining limitations of the claim that Oldcastle disputes Encap’s allegation of infringement. Oldcastle denies that it has infringed either the ‘143 or the ‘101 Patents. It notes that Encap has asserted both method and apparatus claims in its action. In order to infringe either a method or apparatus claim directly, Oldcastle notes that all of the steps in the claim must be performed. *See Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1328 (Fed. Cir. 2008) (“The law of this circuit is axiomatic that a method claim is directly infringed only if each step of the claimed method is performed.”) (citing *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1378–79 (Fed. Cir. 2007)). Encap cannot show direct infringement, Oldcastle contends, because Encap cannot show that it performs all of the steps of the method or apparatus claims asserted by Encap. It is the customer, not Oldcastle, who determines the application rate, applies the carrier to the soil and introduces water. Since it performs none of these steps listed as part of the method claimed in Independent Claims 1 of both the ‘143 and ‘101 Patents, Oldcastle contends it cannot be found to directly infringe either Patent.

It is also well established, however, that “a defendant cannot . . . avoid liability for direct infringement by having someone else carry out one or more of the claimed steps on its behalf.” *BMC Resources*, 498 F.3d at 1379. Accordingly, where the actions of multiple parties combine to perform every step of a claimed method, the claim is directly infringed if one party exercises “control or direction” over the entire process such that every step is attributable to the controlling party, i.e., the “mastermind.” *Id.* at 1380–81. *Muniauction* held that controlling access to a method and providing instructions to users is not enough to establish joint liability as a direct infringer. Instead, the Court held that the control or direction needed to support a finding of direct infringement “is satisfied in situations where the law would traditionally hold the accused direct infringer vicariously liable for the acts committed by another party that are required to complete performance of a claimed method.” *Id.* Expanding on *BMC Resources* and *Muniauction*, the Federal Circuit held in *Akamai Technologies, Inc. v. Limelight Networks, Inc.*, that “there can only be joint infringement when there is an agency relationship between the parties who perform the method steps or when one party is contractually obligated to the other to perform the steps.” 629 F.3d 1311, 1320 (Fed. Cir. 2010). Since Oldcastle’s customers are neither agents nor under a contractual obligation to follow its instructions, it would appear that Oldcastle cannot be found to have directly infringed Encap’s method claims.

Encap points out in its supplemental brief, however, that the panel decision in *Akamai Technologies* has been vacated, and the case has been set for rehearing by the Federal Circuit en banc addressing the following question: “If separate entities each perform separate steps of a method claim, under what circumstances would that claim be directly infringed and to what extent would each of the parties be liable?” 419 Fed. Appx. 989 (Fed. Cir. April 20, 2011). No new decision has

yet been issued. It is therefore unclear at this point what the standard is for determining when parties who combine actions are jointly liable as direct infringers. Given the uncertainty of the law, I cannot say that Encap has shown a likelihood of success on its contention that Oldcastle directly infringes the method claims of its patents.

But even if Oldcastle does not bear joint liability as a direct infringer of the process claims, Encap argues it is at least liable indirectly as an inducer of infringement under 35 U.S.C. § 271(b) or as a contributory infringer under 35 U.S.C. § 271(c). It is true that one who does not directly infringe a patent can be liable for infringement if he either induces another to infringe or contributes to infringement by another. Section 271(b) states “whoever actively induces infringement of a patent shall be liable as an infringer.” Under this provision, the “plaintiff has the burden of showing that the alleged infringer’s actions induced infringing acts and that he knew or should have known his actions would induce actual infringements.” *DSU Med. Corp. v. JMS Co., Ltd.*, 471 F.3d 1293, 1304 (Fed. Cir. 2006) (en banc). “[I]nducement requires evidence of culpable conduct, directed to encouraging another’s infringement, not merely that the inducer had knowledge of the direct infringer’s activities.” *Id.* at 1306. Contributory infringement, on the other hand, is committed by one who “offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use” 35 U.S.C. § 271(c). Here, Encap argues that Oldcastle either induces its customers to infringe the process claims of the ‘143 and ‘101 Patents or knowingly contributes to their

infringement. It does so by selling to them a product the sole purpose of which is to accomplish the process taught by the claims at issue.

Oldcastle argues that neither form of indirect infringement can be established here, however, because in order to prove indirect infringement, a patentee must first show direct infringement. *See Dynacore Holdings Corp. v. U.S. Phillips Corp.*, 363 F.3d 1263, 1272 (Fed. Cir. 2004) (“Indirect infringement, whether inducement to infringe or contributory infringement, can only arise in the presence of direct infringement, though the direct infringer is typically someone other than the defendant accused of indirect infringement.”). As noted above, neither Oldcastle nor its customer performs each of the steps of the claimed method. Thus, neither can be said to have directly infringed. Since Oldcastle’s customers do not directly infringe the claimed methods, Oldcastle contends that it cannot be found liable for inducing or contributing to their infringement.

In other words, Oldcastle contends that Encap cannot show direct infringement of its claims because Oldcastle does not itself perform all of the steps of the claim, and Encap cannot show that Oldcastle indirectly infringed its method claims by inducing or contributing to the infringement of others because no one party performed each step of the claimed method. If Oldcastle is correct, then it would seem that current patent law provides little protection to method patents. If liability for infringement can be avoided by the simple expedient of dividing the steps called for by the method claim between a seller and its customer, an entire class of patents might be rendered unenforceable and worthless. It seems highly unlikely that Oldcastle’s view of the law is correct. This issue, too, is before the Federal Circuit for en banc consideration in *McKesson Technologies, Inc. v. Epic Systems Corporation*, 2011 WL 2173401 (Fed. Cir. May 26, 2011), where the Court has instructed the parties to address the following issue: “If separate entities each perform separate steps of a

method claim, under what circumstances, if any, would either entity or any third party be liable for inducing infringement or for contributory infringement?” In light of the arguments presented and the language of section 271, this Court finds it likely that Oldcastle either directly or indirectly infringed Claim 1 of both the ‘143 and ‘101 Patents.

But these are not the only claims Oldcastle is accused of infringing. Encap also alleges that Oldcastle’s products infringe Claim 22 of the ‘143 Patent and Claim 42 of the ‘101 Patent. Neither of these claims are method claims, so the previous arguments do not apply as to them. Encap describes each of the claims as a delivery system claim. Claim 22 of the ‘143 Patent reads:

A delivery system used to apply polyacrylamide (PAM) to soil comprising: a solid carrier and water-soluble PAM; wherein said solid carrier is made by an agglomeration process, including agitation, pressure, liquid and thermal; wherein application rates of said solid carrier to said soil is related to desired amount of said PAM metered to said soil; wherein said water-soluble PAM binds to said soil.

(‘143 Patent, Col. 12, ll. 55–63.) Claim 42 of the ‘101 Patent is identical except the more general term “water-soluble soil stabilizer” is substituted for water-soluble PAM. (‘101 Patent, Col. 20, ll. 6–15.)

There seems little doubt that Oldcastle’s fast acting lime products infringe these claims. The Green ‘n Grow packaging indicates the product contains lime (which is an inorganic solid carrier). The packaging also indicates the product contains water-soluble soil stabilizer (anionic polyacrylamide copolymer). Green ‘n Grow lime is pelletized limestone. (ECF No. 9 Exs. E, F.) Encap’s deposition of Robert Segal, Oldcastle’s Vice President in charge of Environmental, Health, Safety, and Quality Control, only confirmed Encap’s analysis. Green ‘n Grow is thus a delivery system for applying PAM, a water-soluble soil stabilizer, to soil. The delivery system of Claim 22 further recites “a solid carrier.” (ECF No. 1-1.) As discussed above, Green ‘n Grow contains an

inorganic solid carrier — lime. Claim 22 of the ‘143 Patent further recites “wherein said solid carrier is made by an agglomeration process, including agitation, pressure, liquid, and thermal. . . .” (ECF No. 1-1.) As stated in the literature and on the website for Green ‘n Grow, the product is pelletized (therefore produced by an agglomeration process). (ECF No. 9 Exs. E, F.) And similarly to Claim 1, Claim 22 of the ‘143 Patent recites “wherein application rates of said solid carrier to said soil is related to desired amount of said PAM to be metered to said soil.” (ECF No. 1-1.) As noted above, since the PAM is contained within the solid carrier in the Green ‘n Grow product, the application rate of the solid carrier is related to the amount of PAM that is metered to the soil. (Krysiak Decl. ¶ 65.)

Finally, Claim 22 recites: “wherein said water-soluble PAM binds to said soil.” (ECF No. 1-1.) Again, as noted above, because the charges of the anionic PAM and some of the charges contained in the soil differ, the anionic PAM will necessarily bind to opposite charges in the soil when it is released from the solid carrier. (Krysiak Decl. ¶ 33.) The same is true of the water-soluble soil stabilizer in Claim 42 of the ‘101 Patent. Therefore, the Green ‘n Grow product also likely infringes Claim 22 of the ‘143 Patent and Claim 42 of the ‘101 Patent.

B. Validity

Oldcastle argues that the ‘143 and ‘101 Patents are invalid and unenforceable on a number of separate grounds. First, Oldcastle also argues that Encap’s patents are invalid because they are anticipated in the prior art or obvious in light of that art. Oldcastle also contends that the patents lack adequate written description, are indefinite and lack enablement. Finally, Oldcastle contends that the patents are unenforceable because Encap engaged in inequitable conduct before the PTO. I find none of Oldcastle’s contentions persuasive.

As mentioned above, both Encap patents are presumed valid. 35 U.S.C. § 282. An alleged infringer who raises validity as an affirmative defense has the ultimate burden of persuasion at trial and must prove invalidity by clear and convincing evidence. *Technology Licensing v. Video Tech Inc.*, 545 F.3d 316, 327 (Fed. Cir. 2008). At the preliminary injunction stage, the trial court does not resolve the validity question, but only makes an assessment of the persuasiveness of the challenger's evidence. *New England Braiding Co. v. A.W. Chesterton Co.*, 970 F.2d 878, 883 (Fed. Cir. 1992). "While it is not the patentee's burden to prove validity, the patentee must show that the alleged infringer's defense lacks substantial merit." *Id.* at 883; *see also Titon Tire Corp. v. Case New Holland, Inc.*, 566 F.3d 1372, 1377 (Fed. Cir. 2009).

A person is only entitled to a patent for a novel invention. 35 U.S.C. § 102. Thus, a patent is invalid if it is anticipated by prior art. A prior art reference anticipates a claim "if it includes all of the elements and limitations of the claims and enables one of skill in the field of invention to make and use the claimed invention." *Merck & Co. v. Teva Pharmaceuticals USA, Inc.*, 347 F.3d 1367, 1372 (Fed. Cir. 2003.) A patent claim will also be found invalid if it would have been obvious to a person of ordinary skill in the art. 35 U.S.C. § 103(a).

Oldcastle cites to the following prior art and alleges that it either anticipates or makes obvious the patents-in-suit: U.S. Patent No. 2,625,529 (Hedrick); U.S. Patent No. 6,829,860 (Lee); U.S. Patent No. 6,395,051 (Arnold); and a prior art publication to Steve Green, et al. (Green). At the hearing on the motion, Oldcastle did not cite to any expert testimony, or testimony of one of ordinary skill in the art, or any testimony from Oldcastle employees to support the invalidity allegations. Instead, Oldcastle relied on attorney argument. After the Court requested supplemental briefing on the issue of infringement, Oldcastle submitted an expert report, but Oldcastle's expert

addresses only the issue of whether Encap's patents meet the definiteness, written description and enablement requirements of 35 U.S.C. § 112. Thus, it continues to rely only on attorney argument for its anticipation and obviousness arguments. But unsubstantiated attorney argument regarding the meaning of technical evidence is no substitute for competent, substantiated expert testimony. *See Invitrogen Corp. v. Clontech Labs, Inc.*, 429 F.3d 1052, 1068 (Fed. Cir. 2005). The attorney argument at issue here is particularly unconvincing as the patent examiner specifically stated the prior art was not material to the validity of the claims. Furthermore, even comparing the prior art to the patents-in-suit, I am not convinced they raise substantial questions of anticipation or obviousness. Each prior art reference will be discussed in turn below.

Hedrick teaches that the PAM/soil stabilizers may be added directly to the soil, or that PAM soil stabilizers can be provided in a mixture with a solid carrier. (ECF No. 32 Ex. 10.) In the industry this is known as "bulk blending." In bulk blending, the PAM/soil stabilizer is not added to, applied to, or impregnated into the solid carrier. (ECF No. 41 at 26.) Rather, the PAM/soil stabilizer and solid carrier are simply provided together, as separate particles in a mixture. Because the particles are mixed together, there can be no release of PAM/soil stabilizer from the solid carrier. Therefore, Hedrick fails to teach that the application rates of PAM to soil are related to a desired amount to be metered into the soil. As Hedrick fails to teach this element, it cannot anticipate or make obvious the claims of the patents-in-suit. Additionally, Hedrick does not teach impregnating and/or applying water-soluble PAM to a solid carrier. Therefore, Hedrick does not teach the leaching of said PAM out of said solid carrier with water into soil where it then binds said PAM to said soil. Hedrick also does not teach that the application rates of a solid carrier is related to a desired amount of PAM to be metered to said soil.

Additionally, Hedrick was cited during prosecution of the patent applications at issue here and was found not to be material. “When no prior art other than that which was considered by the PTO Examiner is relied on by the attacker [], he has the additional burden of overcoming the deference that is due to a qualified government agency presumed to have properly done its job.” *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1353 (Fed. Cir. 2001). Examiner Palo independently reviewed Hedrick in relationship to the aforementioned Encap patents and found it to be immaterial. Furthermore, there is no real suggestion that the examiner failed to do his job properly. Accordingly, Hedrick does not appear to render the patents-in-suit as anticipated or obvious.

Lee similarly fails. Lee does not teach that the polymers are ever applied to the soil. (ECF No. 32 Ex. 11.) Lee teaches that tackifiers are impregnated in pelletized straw mulch to bond chemically the pelletized mulch to maintain it on the soil surface on which they are spread. (*Id.* Col. 6 ll. 10–14.) Lee also teaches that tackifiers also bond the mulch fibers to each other to help the fibers adhere thereto. (*Id.* Col. 6 ll. 14–16.) Thus, unlike in Hedrick, the polymers in Lee are applied to the solid carrier. But according to Lee, the polymers help the straw bind to the soil and to other straw but the PAM never leaves the straw. Lee thus does not teach the leaching/releasing of PAM out of the solid carrier and into the soil using water; binding PAM to soil; and application rates of PAM to soil related to a desired amount of PAM to be metered to the soil. (Krysiak Decl. ¶ 33.) Additionally, Examiner Palo independently reviewed Lee in relation to the aforementioned Encap patents and found it to be immaterial. Lee therefore does not appear to render the patents-in-suit as anticipated or obvious.

Arnold is another of the examples of allegedly problematic prior art cited by Oldcastle. (ECF No. 31-1 at 24.) Like Hedrick, Arnold involves bulk blending; it teaches the bulk blending

of PAM with a solid carrier. Therefore, similarly, Arnold does not teach that the PAM/soil stabilizer is added to the solid carrier. Further, as the PAM/soil stabilizer is bulk blended, there is no release of the PAM/soil stabilizer *from* the solid carrier. Arnold also does not teach that the application rates of PAM to soil are related to a desired amount of PAM to be metered to the soil. (Krysiak Decl. ¶ 35.) And again, the patent examiner reviewed Arnold in relation to the patents-in-suit and found it to be immaterial. Accordingly, Arnold does not appear to render the Encap patents as anticipated or obvious. In sum, there is no “substantial question” as to the validity of any of the claims of the patents-in-suit based on anticipation and/or obviousness.

Oldcastle also argues the ‘101 and ‘143 Patents are invalid under 35 U.S.C. § 112 as they fail to comply with the definiteness requirement. (ECF No. 31-1 at 26.) More specifically, Oldcastle contends the meaning of “desired amount” as it is used by the patents-in-suit is unclear. (*Id.*) Oldcastle contends that a “desired amount” is a determination made by an individual user based on subjective beliefs. It is improper for patents to turn on subjective beliefs. *Datamize LLC v. Plumtree Software Inc.*, 417 F.3d 1342, 1347–48 (Fed. Cir. 2005). As noted above, Oldcastle submitted an expert report after the hearing in further support of its argument that the Patents are invalid as indefinite and insufficiently described.

The Court finds the report of Oldcastle’s expert unpersuasive. Although Oldcastle’s expert, Steven Green, appears generally well-qualified (he holds doctoral and master degrees in soil management and land use from Purdue University and teaching positions in the College of Agriculture and Technology at Arkansas State University at Jonesboro, Arkansas), he does not appear knowledgeable about the use of soil stabilizers in residential lawn care. For example, Dr. Green states in his report:

Based on my work in the field, PAM typically is used for erosion control in areas where there is no vegetation and in areas where the soil is sloped. Most commonly PAM is used at construction sites and on roadsides. PAM is also used on agricultural land, especially in furrow irrigated agriculture. I am uncertain why a consumer would need to apply PAM to a residential lawn or what benefit the PAM would provide (even if it were applied at a minimum recommended rate).

(Expert Report of Steven Green, Phd., ECF No. 54-3, ¶ 7.) Of course, if PAM provided no benefit to residential lawns, why did Oldcastle reverse engineer Encap's product and add PAM to its own lime product? In any event, I conclude that Oldcastle's indefiniteness arguments do not raise a substantial question as to validity of the claims at issue.

Oldcastle argues, for example, that the use of the phrase "desired amount of said PAM" in several claims renders those claims fatally unclear because it is unclear what the desired amount might be. But as Encap points out, the "desired amount of PAM to be metered to the soil" is controlled by the amount of PAM/soil stabilizer added to, applied to, or impregnated in the solid carrier. (See '143 Patent Col. 7, ll. 61–63; '101 Patent Col. 8, ll. 61–64.) The solid carrier acts as a delivery system for the soil stabilizer. By controlling the rate of solid carrier metered to the soil, one in turn controls the amount of PAM/soil stabilizer metered to the soil. Thus, the manufacturer of the product — not the user — determines the amount of PAM to be metered to the soil. The Patents teach a method or system for applying PAM/soil stabilizer to soil in whatever amount the manufacturers decides upon.

Oldcastle also contends the term "metered" fails to meet the definiteness requirement as it is allegedly unclear in what regard the term "metered" is used or how much "metering" is required. (ECF No. 31-1 at 27.) But the plain meaning of the term "metered" is applied at a measured rate. By "metering" the solid carrier to the soil, one is applying the PAM to the soil at a rate proportional

to the amount of PAM contained in the solid carrier. Further, there is no requirement for how much “metering” is needed, nor is there a requirement for uniformity in metering. Such limitations should therefore not be read into the claims.

Oldcastle further argues claims of the ‘143 and ‘101 Patents are invalid under 35 U.S.C. § 112 for failure to comply with the written description and enablement requirements. This is just a reformulation of the argument addressed above. Again, these arguments lack merit. Oldcastle asserts that the language in Claim 1 of the ‘101 (“wherein application rates of said solid carrier to said soil is based on a desired amount of said water-soluble soil stabilizer to be metered to said soil”) is not supported by the specification and/or not enabled to one of ordinary skill in the art. But the specification explains that “the solid carrier acts as a delivery system for the PAM.” (‘143 Patent, Col. 7, l. 61.) By controlling the rate of solid carrier metered to the soil, the user controls the amount of PAM metered to the soil. (*Id.* at ll. 61–63.) The specifications disclose and enable users to set any desired application rate based on the amount of PAM/soil stabilizer a user adds to, applies to, or impregnates in the solid carrier. According to the specification, the application rates may be adjusted on several factors based on soil type, slope, and type of erosion targeted. The specification also contains an example of how the agglomerated PAM/carrier product’s application rate is related to or based on the desired amount of PAM/soil stabilizer metered to the soil. (*See* ‘143 Patent at Col. 11, ll. 5–8; ‘101 Patent at Col. 15, ll. 43–46.) Thus, one of skill in the art would know what is meant by the “desired amount” and “metering” and there is clear support in the specification for this claim language. (Krysiak Decl. ¶ 17.)

Finally, Oldcastle contends the patents-in-suit are unenforceable due to allegedly inequitable conduct by Encap’s prosecution counsel, Attorney Weiss, who is also counsel for Encap in this

action. Attorney Weiss also prosecuted the ‘643 Application, which is the application upon which Oldcastle bases its inequitable conduct assertions. On March 5, 2003, Application No. 10/379,643 (the ‘643 Application) was filed with the USPTO. (ECF No. 32-19 ¶ 17.) The ‘643 Application was a continuation in part of the ‘072 Application.¹ Although the ‘643 and ‘072 Applications were related and prosecuted at the same time, they were assigned to different examiners at the USPTO. Chihaya Sayala was the primary examiner on the ‘643 Application; Francis Palo and Jeffrey Gellner were the primary examiners on the ‘072 Application. (ECF Nos. 32-13, 32-16.)

Examiner Sayala cited Arnold as an anticipatory rejection reference against the claims of the ‘643 Application. (ECF No. 32-19.) Examiner Sayala then cited Arnold an additional seven times in Office Actions spanning from December 22, 2005 to February 12, 2009. (*Id.*) On August 19, 2009, the USPTO issued a Notice of Abandonment after Encap failed to reply to the Office Action mailed on February 12, 2009, which also contained a citation to Arnold as an anticipatory reference. (*Id.*) Encap then abandoned the ‘643 Application. (*Id.*) Despite these multiple references to Arnold as an anticipatory reference during the prosecution of the related application, there is no record in the USPTO files that Arnold was cited to the USPTO, Examiner Palo, or Examiner Gellner with regard to the ‘072 Application.

But as Encap notes, the ‘643 Application differs from the ‘143 Patent; the claims of the ‘643 Application did not include “binding said PAM to said soil; wherein application rates of said solid carrier to said soil is related to desired amount of said PAM to be metered to said soil.” A prior art reference should be disclosed only if it is material to the claims of that patent. *Therasense, Inc. v.*

¹ U.S. Application No. 10/271,072 (the ‘072 Application) issued as U.S. Patent No. 7,503, 143 (the ‘143 Patent in question in this suit). The other patent in question, the ‘101 Patent, is a continuation application from the ‘072 Application.

Becton, Dickinson and Co., 649 F.3d 1276, 1291 (Fed. Cir. 2011). “[A]s a general matter, the materiality required to establish inequitable conduct is but-for materiality . . . prior art is but-for material if the PRO would not have allowed a claim had it been aware of the undisclosed prior art. Hence, in assessing the materiality of a withheld reference, the Court must determine whether the PTO would have allowed the claim if it had been unaware of the undisclosed reference.”) In addition to the differences between the applications, Examiner Palo confirmed Arnold’s lack of materiality in writing. Thus, I cannot say Encap engaged in inequitable conduct here.

In sum, I am not convinced any of Oldcastle’s invalidity contentions have merit. The patent examiners explicitly dismissed the prior art referenced here (Hedrick, Lee, and Arnold) as immaterial to the patents-in-suit. I am similarly unconvinced by the arguments regarding indefiniteness, the written description and enablement requirements, and inequitable conduct. I therefore conclude Oldcastle’s invalidity arguments are not cause for concern regarding the preliminary injunction.

IV. Irreparable Harm

I also find that Encap is likely to suffer irreparable harm if Oldcastle continues selling an infringing product, produced by infringing methods. As discussed above in the legal standard, a party requesting a preliminary injunction must show that damages alone would not be enough to compensate said party; the party must demonstrate irreparable harm will likely occur. Here, I am convinced that due to the price erosion of the product, combined with Encap’s size, Encap would suffer irreparable harm.

Price erosion has constituted irreparable harm in other preliminary injunction cases. *See Abbott Laboratories v. Sandoz, Inc.*, 544 F.3d 1341, 1361–62 (Fed. Cir. 2008) (finding price erosion and loss of market position are evidence of irreparable harm); *Bio-Technology Gen. Corp. v. Genentech, Inc.*, 80 F.3d 1553, 1556 (Fed. Cir. 1996) (finding loss of revenue, goodwill, and research and development constitutes irreparable harm); *Polymer Technologies, Inc. v. Bridewell*, 103 F.3d 970, 975–76 (Fed. Cir. 1996) (concluding loss of market opportunities could not be quantified or adequately compensated and thus was evidence of irreparable harm). Here, the price erosion is severe and Encap realistically contends if Oldcastle continues infringing, Encap will be forced to exit the market segment it created. (Krysiak Decl. ¶ 43.)

As discussed above, Oldcastle’s product is a copycat that appears to have pirated Encap’s patented technology and product formulation. This gave Oldcastle the advantage of selling the same technology and product without investing in research, development, intellectual property, or market development efforts. Thus, Oldcastle is able to offer its product to the market at a lower price than Encap. (Krysiak Decl. ¶ 45.) In contrast, Encap is seeking to recoup its investments through sales of its AST® products. Encap contends it cannot compete with Oldcastle’s reduced price because Oldcastle reduced the price to such a point that Encap cannot make a profit margin. (Krysiak Decl. ¶ 46.) Pricing at Lowe’s offers further support for Encap’s contention here. Encap has been selling its Fast Acting Lime product through its distributor, Pennington Seed, to Lowe’s for five years. Encap and its distributor spent “significant resources” to educate the Lowe’s buyer of the benefits associated with the new Fast Acting Lime category in order to secure the initial placement in the stores. (ECF No. 12 at 44.) Once Encap received placement, it developed consumer awareness for the Fast Acting Lime category by investing in print, internet, in-store point of sale merchandising,

advertising, and other specialty awareness programming. (Krysiak Decl. ¶ 49.) The retail price associated for the Encap/Pennington Fast Acting Lime at Lowe's has been \$14.97, on average. (Krysiak Decl. ¶ 50.) But in 2011, Oldcastle secured a test market at Lowe's with a retail price of \$10.96. (*Id.*) A \$4.01 reduction in retail pricing for a copycat product puts Encap's future sales at Lowe's in significant danger.

Similarly, Encap Fast Acting Lime Plus AST® is marketed through more than 50 distributor shows throughout the country. Encap has a Dealer (customer) that purchased Encap's Fast Acting Lime product through Agway for the past five years. In 2010, the Dealer purchased the product for \$6.90 per bag. Encap offered the bag to the Dealer in 2011 at \$7.10 per bag. When approached with this price, the Dealer told Encap they were going to purchase from Oldcastle instead, as Oldcastle's product was the same and available for \$6.25 a bag. The Dealer said it would only purchase from Encap if it could match the price. Encap met the price, significantly reducing the gross margin on the product. (Krysiak Decl. ¶ 51.) These examples illustrate the significant price erosion occurring due to Oldcastle's sales. I am thus convinced that Encap will suffer irreparable harm if Oldcastle is continued to allow to sell its copycat product.

Oldcastle suggests Encap's argument for irreparable harm cannot stand as Encap delayed bringing this suit. Courts have certainly considered delay in assessing the likelihood of irreparable harm in preliminary injunctions. *See, e.g., High Tech Med. Instrumentation v. New Image Indust.*, 49 F.3d 1551, 1557 (Fed. Cir. 1995) (finding seventeen month delay demonstrated there was "no apparent urgency to the request for injunctive relief"); *Rexnord, Inc. v. Laitram Corp.*, 628 F. Supp. 467, 474 (E.D. Wis. 1986) (finding six month delay fatal to defendants' contention of irreparable harm); *Am. Permahedge v. Barcana, Inc.*, 857 F. Supp. 308, 325 (S.D.N.Y. 1994) (finding fifteen-

month delay fatal to plaintiff's claim of irreparable injury). But delay is a factor to be considered; it is not dispositive of determining there was no irreparable harm. Here, I find that any delay incurred was more than substantially justified, as Encap has given good reasons for the delay in bringing this suit. First, Encap's '101 Patent — the broader of the two patents-in-suit — was not issued until January 2011. Encap wanted to be in a stronger position to bring this suit, and waiting until it secured the rights to a broader patent is a good way to do that. This makes good sense particularly in light of the expense of patent litigation, especially for such a small company. Furthermore, Encap has presented evidence of good faith attempts to settle the case. There is a strong public interest in encouraging settlement rather than running to the courthouse for every dispute; Encap therefore should not be penalized for attempting to settle in good faith with Oldcastle. Additionally, the price erosion only became a serious threat to Encap recently, with the 2011 Lowe's \$4 pricing differential. Finally, in many ways Encap did not have an opportunity to realize the strength of its case until discovery, as documents have come to light suggesting infringement was not only likely but willful. For these reasons, I am convinced Encap's wait in bringing this suit is more than justified; any delay incurred is by no means fatal to Encap's case.

V. Other Factors

I am also convinced the balance of the hardships weighs in Encap's favor. Here, only a small amount of Oldcastle's overall revenues are derived from the sale of its infringing product. Oldcastle sells a wide variety of other products, including, among other things, concrete masonry, precast lawn, garden, and paving products, cement mixes, lightweight aggregates, bagged decorative

stone, and concrete roof tiles. (Krysiak Decl. ¶ 63.) In contrast, as discussed above, Encap will suffer irreparable injury if Oldcastle is permitted to continue selling its copycat product.

I similarly conclude the public interest weighs in Encap's favor. It is in the public interest to uphold patent rights against an adjudicated infringer. *i4i Ltd. Partnership v. Microsoft Corp.*, 598 F.3d 831, 863 (Fed. Cir. 2010). This is particularly true when, as here, there are allegations of willful infringement. Selling a lower priced product does not justify infringing a patent. "Were that to be a justification for patent infringement, most injunctions would be denied because copiers universally price their products lower than innovators." *Payless Shoesource, Inc. v. Reebok Int'l Ltd.*, 998 F.2d 985, 991 (Fed. Cir. 1993). *See also Pfizer, Inc. v. Teva Parms USA, Inc.*, 429 F.3d 1364, 1382–83 (Fed. Cir. 2005); *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1383 (Fed. Cir. 2006) (holding public interest included acknowledgment of "the importance of the patent system in encouraging innovation"); *Richardson v. Suzuki Motor Co., Ltd.*, 868 F.2d 1226, 1246–47 (Fed. Cir. 1989) ("Infringement having been established, it is contrary to the laws of property, of which the patent law partakes, to deny the patentee's right to exclude others from use of his property."). In sum, the public interest is served by healthy, fair competition in the marketplace, which is advanced by keeping infringing products out of it. *See, e.g., TiVo v. EchoStar Communications Corp.*, 446 F. Supp. 2d 664, 670 (E.D. Tex. 2006), *aff'd in part, rev'd in part on other grounds*, 516 F.3d 1290 (Fed. Cir. 2008).

VI. Conclusion

In sum, I conclude that Encap has a substantial likelihood of success on the merits of its patent infringement claims. Not only has Encap demonstrated a strong likelihood of infringement

on the ‘143 and ‘101 Patents, but it has also demonstrated that the infringement was quite possibly willful. I am further convinced that Encap will suffer irreparable harm, in the form of price erosion, if the motion for preliminary injunction is not granted. Granting the motion for preliminary injunction is also fair in light of the balance of the equities and the public interest in protecting intellectual property. For all of these reasons, Encap’s motion for a preliminary injunction is **GRANTED**. Oldcastle is hereby enjoined from manufacturing, distributing or selling its Green ‘n Grow and Jolly Gardener fast acting lime products. Although Encap also seeks injunctive relief relating to Oldcastle’s alleged infringement of its trade dress relating to the same product, its request for such relief is moot in light of the relief already granted.

Rule 65(c) states that the court “may issue a preliminary injunction . . . only if the movant gives security in an amount that the court considers proper to pay the costs and damages sustained by any party found to have been wrongfully enjoined or restrained.” Fed. R. Civ. P. 65(c). Defendants, in the hearing on the motion, suggested a reasonable bond would be in the neighborhood of \$10 million. However, these products only represent \$1 million in annual sales for Oldcastle, as Encap noted (and therefore requested a bond in the order of \$1 million). The Court intends to put this case on a fast track and schedule it for trial promptly. These factors are good cause to limit the bond greatly. Consequently, the bond is set for \$2 million. The Court will therefore condition the issuance of the preliminary injunction on Encap’s posting of a bond in such amount.

Dated this 18th day of May, 2012.

s/ William C. Griesbach
William C. Griesbach
United States District Judge